

ABSTRACT OF THE DISCLOSURE

A high-thrust linear motor has coils wound with a minimal blank space in slots of a magnetic member (core) to generate high thrust and permit smooth movement of a moving member. The high-thrust linear motor includes a magnetic member having a plurality of slots formed in series in an axial direction thereof. The slots extend from both sides of the magnetic member in opposite directions intersecting the axial direction in corresponding relation to each other. Coils having a plurality of phases are wound in respective pairs of slots on both sides of the magnetic member. Field magnets extend in the axial direction at both sides of the magnetic member so as to face an effective conductor portion of each coil. Each field magnet has a plurality of pairs of magnetic poles magnetized in the axial direction. According to a method of producing the high-thrust linear motor, coils are wound in respective pairs of slots on both sides of the magnetic member while the magnetic member is being rotated.